

ATTORNEY DOCKET NC
14214RR (NORTH 2286000)

PATENT APPLICATION
SERIAL NO. 10/028,476

REMARKS

The Office Action dated June 29, 2005 has been carefully considered. Claims 1-27 are pending. The above amendments and the following remarks are presented in a sincere attempt to place this Application in condition for allowance. Claims 1, 6, 10-19 and 24 have been amended in this Response. Reconsideration and allowance are respectfully requested in light of the above amendments and the following remarks.

Claims 11-18 have been amended to correct certain typographical errors. The word "method" has been replaced with the phrase "base station" in Claims 11-18 to indicate that these claims depend upon Claim 10. Applicants contend that the rationale underlying this amendment bears no more than a tangential relation to any equivalence in question because the language has been added merely to correct a typographical error. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 122 S.Ct. 1831 (2002).

Claims 1-26 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Insofar as these rejections may be applied against the amended claims, they are deemed overcome.

Claims 1, 10, and 19 have been amended to clearly describe the parameter F. Accordingly, F "represents the average number of sectors that a mobile station may obtain service from concurrently." Support for this amendment can be found, among other places, page 5, line 27 through page 6, line 4 of the original Application. Applicants respectfully submit that amended Claims 1, 10, and 19 "particularly point out and distinctly claim" the parameter F as required under 35 U.S.C. § 112, second paragraph.

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Applicants respectfully submit that the language "optimal number" in Claims 3, 12, and 21 does clearly describe the claimed subject matter. A clear description of the language "optimal number" is provided in the original Application at page 5, lines 17-26. The base station "determines the optimal number of active users that it is serving or may service in the system." The optimal number of active users can be determined by a number of factors including "the average number of actual users requesting service in the sector, the throughput desired for the system, and the type of service being requested by each user." The meaning of "optimal number" is apparent from the descriptive portion of the specification. M.P.E.P. 608.01(o).

The phrase "may be" in Claims 6, 15, and 24 has been replaced with the language "*can* be supported by N channels." Applicants contend that the rationale underlying this amendment bears no more than a tangential relation to any equivalence in question because the additional language has been added merely for clarity of terminology. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 122 S.Ct. 1831 (2002). Accordingly, Applicants respectfully request that the rejections of Claims 1-27 under 35 U.S.C. § 112, second paragraph be withdrawn and that Claims 1-27 be allowed.

Claims 1-3, 6-12, 15-21, and 24-27 stand rejected under 35 U.S.C. § 103(a) in view of U.S. Patent Application No. 2002/0105929 A1 to Chen et al. ("Chen") and U.S. Patent Application No. 2003/0021236 A1 to Kenney et al. ("Kenney"). Insofar as these rejections may be applied against the amended claims, they are deemed overcome.

Claim 1 has been amended to clarify a distinguishing feature of the present invention. The method of Claim 1 describes "determining an effective number of users equal to the product of a number of active users in the system and a value relating to F, wherein *F* represents the average number of sectors that a mobile station may obtain service from concurrently." Support for this

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amendment can be found, among other places, page 5, line 17 through page 6, line 9 of the original Application.

The Chen and Kenney references do not teach, suggest, or disclose this feature of the present invention. Specifically, Chen discloses a forward link design where time division multiplexing is employed between data and control information on the forward link to service multiple users per slot. Kenney discloses a method for estimating the channel phase of a communication channel upon which data is communicated.

In contrast with the cited references, the present invention determines an effective number of users by multiplying the number of active users and the "average number of sectors that a mobile station may obtain service from concurrently" (parameter F). This product produces an effective number of mobile station users. The utilization of parameter F makes this effective number of mobile station users more accurate than the cited references in any combination. Furthermore, the Examiner relies on Kenney determining an effective number of mobile station users by using a value relating to F assuming that F=1. In the present invention F is a variable, which cannot be assumed to be equal to 1. It is clear that Kenney does not utilize the average number of sectors that a mobile station may obtain service from concurrently to calculate the effective number of mobile station users. These features of the present invention are clearly not disclosed by Chen and Kenney, taken either singularly or in combination.

In view of the foregoing, it is apparent that the cited references do not disclose, teach, or suggest the unique combination now recited in amended Claim 1. Applicants therefore submit that amended Claim 1 is both clearly and precisely distinguishable over the cited references in a patentable sense. Accordingly, Applicants respectfully request that the rejection of Claim 1 under

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35 U.S.C. § 103(a) in view of Chen and Kenney be withdrawn and that amended Claim 1 be allowed.

Claim 2-3 and 6-9 depend upon and further limit amended Claim 1. Hence, for at least the aforementioned reasons, these Claims should be deemed to be in condition for allowance. Accordingly, Applicants respectfully request that the rejections of dependent Claims 2-3 and 6-9 also be withdrawn.

Independent Claims 10 and 19 have been amended to clarify the same distinguishing feature as Claim 1. Hence, for at least the aforementioned reasons that amended Claim 1 is deemed to be in condition for allowance, amended Claims 10 and 19 should also be deemed to be in condition for allowance. Claims 11-12 and 15-18 depend upon and further limit amended Claim 10, and Claims 20-21 and 24-27 depend upon and further limit amended Claim 19. Therefore, Claims 11-12, 15-18, 20-21, and 24-27 should also be deemed to be in condition for allowance. Accordingly, Applicants respectfully request that the rejections of Claims 10-12, 15-21, and 24-27 under 35 U.S.C. § 103(a) in view of Chen and Kenney be withdrawn and that Claims 10-12, 15-21, and 24-27 be allowed.

Claims 4-5, 13-14, and 22-23 stand rejected under 35 U.S.C. § 103(a) in view of Chen and U.S. Patent 5,787,080 to Hulyalkar et al. ("Hulyalkar"). Insofar as these rejections may be applied against the amended claims, they are deemed overcome.

Claims 4-5, Claims 13-14, and Claims 22-23 depend upon and further limit amended Claim 1, amended Claim 10, and amended Claim 19, respectively. Hence, for at least the aforementioned reasons, these Claims should be deemed to be in condition for allowance. Accordingly, Applicants respectfully request that the rejections of Claims 4-5, 13-14, and 22-23 under 35 U.S.C. § 103(a) in view of Chen and Hulyalkar be withdrawn and that Claims 4-5, 13-14, and 22-23 be allowed.

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Claims 1, 10, and 19 stand rejected under 35 U.S.C. § 103(a) in view of U.S. Patent 6,278,702 B1 to Deane et al. ("Deane") and Kenney. Insofar as these rejections may be applied to the amended claims, they are deemed overcome.

Claim 1 has been amended to clarify a distinguishing feature of the present invention. The method of Claim 1 describes "determining an effective number of users equal to the product of a number of active users in the system and a value relating to F, wherein F represents the average number of sectors that a mobile station may obtain service from concurrently." Support for this amendment can be found, among other places, page 5, line 17 through page 6, line 9 of the original Application.

The Deane and Kenney references do not teach, suggest, or disclose this feature of the present invention. Specifically, Deane discloses a method for reducing the dynamic range of a signal input to a power amplifier in a CDMA forward-link transmission system. Kenney discloses a method for estimating the channel phase of a communication channel upon which data is communicated.

In contrast with the cited references, the present invention determines an effective number of users by multiplying the number of active users and the "average number of sectors that a mobile station may obtain service from concurrently" (parameter F). This product produces an effective number of mobile station users. The utilization of parameter F makes this effective number of mobile station users more accurate than the cited references in any combination. Furthermore, the Examiner relies on the fact that Kenney determines an effective number of mobile station users by using a value relating to F assuming that F=1. In the present invention F is a variable, which cannot be assumed to be equal to 1. It is clear that Kenney does not utilize the "average number of sectors that a mobile station may obtain service from concurrently" to calculate the effective number of

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mobile station users. These features of the present invention are clearly not disclosed by Deane and Kenney, taken either singularly or in combination.

In view of the foregoing, it is apparent that the cited references do not disclose, teach, or suggest the unique combination now recited in amended Claim 1. Applicants therefore submit that amended Claim 1 is both clearly and precisely distinguishable over the cited references in a patentable sense. Accordingly, Applicants respectfully request that the rejection of Claim 1 under 35 U.S.C. § 103(a) in view of Deane and Kenney be withdrawn and that amended Claim 1 be allowed.

Independent Claims 10 and 19 have been amended to clarify the same distinguishing feature as Claim 1. Hence, for at least the aforementioned reasons that amended Claim 1 is deemed to be in condition for allowance, amended Claims 10 and 19 should also be deemed to be in condition for allowance. Accordingly, Applicants respectfully request that the rejections of Claims 10 and 19 under 35 U.S.C. § 103(a) in view of Deane and Kenney be withdrawn and that amended Claims 10 and 19 be allowed.

Applicants have now made an earnest attempt to place this Application in condition for allowance. For the foregoing reasons and for other reasons clearly apparent, Applicants respectfully request full allowance of Claims 1-27.

Applicants do not believe that any fees are due; however, in the event that any fees are due, the Commissioner is hereby authorized to charge any required fees due (other than issue fees), and to credit any overpayment made, in connection with the filing of this paper to Deposit Account No. 50-0605 of CARR LLP.

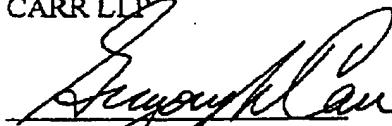
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Should the Examiner deem that any further amendment is desirable to place this Application in condition for allowance, the Examiner is invited to telephone the undersigned at the number listed below.

Respectfully submitted,

CARR LLP


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